

How Does RCRA Work?

The mission of the U.S.
Environmental Protection
Agency (EPA) is to protect
human health and safeguard the environment.
One way EPA helps fulfill
its mission is by regulating the management and
disposal of hazardous
wastes under the
Resource Conservation
and Recovery Act (RCRA).
RCRA has the following
three general goals: To
protect human health and
the environment • To
reduce waste while conserving energy and natural resources • To reduce
or eliminate the genera-

n its mission to protect human health and the environment, RCRA regulates the management of hazardous waste using a "cradle-to-grave" approach. In other words, a hazardous waste is regulated from the moment it is created to the time of its final disposal. RCRA affects everyone who handles a hazardous waste throughout this life cycle, including hazardous waste generators, transporters, and the facilities that treat, store, or dispose of hazardous waste. Under this system, thousands of individuals and facilities, from your local dry cleaner to hazardous waste incinerators, are regulated by RCRA.

Due to the scope and number of people affected by RCRA, EPA faces an enormous task in ensuring compliance with the regulations. RCRA does include a number of provisions, however, that make its implementation more effective, including:

 Keeping track of who is handling waste and how it's being handled.

- Issuing permits to facilities that treat, store, or dispose of hazardous waste to dictate how these facilities will operate.
- Enlisting the aid of states to help run RCRA
- Penalizing those who are not in compliance with RCRA.
- Requiring cleanup of hazardous waste releases to the environment.



In order to ensure that waste is handled properly from its generation to its disposal, RCRA requires waste to be tracked and monitored in various ways.

Identification Numbers

EPA assigns an identification number to any person or company that handles hazardous waste, including generators; transporters; and treatment, storage,



and disposal facilities (TSDFs). To obtain an identification number, facilities must submit EPA Form 8700-12, which describes the location of the facility, its activities, and the amount and kinds of waste it manages.

Manifests

EPA also keeps track of what happens to the waste after it's generated. Shipments of hazardous waste must be accompanied by a document called the Uniform Hazardous Waste Manifest (Form 8700-22). The manifest follows the waste from the generator site to the disposal site, creating a paper trail that will reveal and record any problems during shipment. Information in the manifest includes the type and amount of waste being shipped, as well as the identity of the transporter and the shipment's destination. When the waste reaches the end of its journey, the owner of the destination facility must return a signed copy of the manifest to the generator, indicating that the waste shipment was successfully completed. If a problem occurs during shipping and the waste never arrives at the destination facility, generators must notify their regulatory agency so the problem can be investigated and corrected.

The Permitting System

TSDFs, the last link in the "cradle-to-grave"

management sequence, are responsible for the ultimate disposal

of hazardous waste. In light of

the risks associated with treat-

ing, storing, and disposing of

hazardous waste, TSDFs are

more heavily scrutinized and

the environment, such as plans to sample and analyze incoming waste, security measures, inspections, personnel training, and ground-water monitoring, if applicable. The permit application process can differ based on whether a facility is new or already in existence when it becomes subject to RCRA (e.g., a facility in operation when RCRA was enacted or a facility that is newly subject to RCRA due to a change in regulations). Owners and operators of new TSDFs must apply for and receive a permit from EPA before they are allowed to treat, store, or dispose of any hazardous waste. Facilities already in operation may continue to function temporari-

> To protect the rights of individuals, the RCRA permitting process includes provisions that allow for citizen participation. The public must be notified when a TSDF applies for a permit and they are kept informed of the application's status as it is reviewed. Throughout the application process, there are public meetings and hearings, and time is allotted for public comment. In addition, the public has the right to appeal EPA's final permit decision. Once a facility receives an approved permit, any modifications to that permit might require public notification.

ly while their permits are processed (these facilities

have what is called interim status).

regulated than hazardous waste generators or trans-

porters. To ensure TSDFs are designed and operated

safely, EPA has a rigorous approval process for facilities

attempting to obtain an operating permit. More than just proof of EPA's permission, a facility's operating permit

details what types of waste it is allowed to handle and what types of treatment, storage, or disposal activities it

may conduct. The permit also contains any site-specific

requirements necessary to protect human health and

State Authorization

States can apply to assume primary responsibility for implementing their own RCRA hazardous waste program with oversight from EPA. For a state to become authorized, it must devise a hazardous waste management program that is at least as stringent as RCRA. Once EPA approves a proposed program, the state becomes the agency that monitors and enforces proper hazardous waste management within its borders. If necessary, however, EPA may still help authorized states enforce their programs. In this way, even though EPA does not directly oversee regulation, it can continue to ensure that federal standards are met.

State involvement helps EPA manage RCRA more effectively because it alleviates some of the burden involved in administering and monitoring hazardous waste management across the nation. In addition, when RCRA is managed by individual states, it is run by people who are familiar with local issues and understand the interests of the regulated community.

Most states have chosen to become authorized by EPA to run their own RCRA programs. As EPA passes new national waste management laws, these states must update their programs and enforce current standards. In the few states and territories that do not have authorized programs, RCRA is implemented by EPA's regional offices.

Enforcing RCRA

Some individuals and companies might not be in compliance with RCRA, either by accident, by misinterpreting or being unaware of regulations, or by deliberately conducting illegal waste management practices. RCRA gives EPA or an authorized state the authority to conduct inspections to make sure that individual facilities are in compliance with regulations.

If a violation is discovered during an inspection, EPA or the authorized state may pursue enforcement action, ranging from informal letters and phone calls notifying the errant facility, to civil and criminal penalties that may include fines and/or imprisonment. Fines for the worst recurrent transgressions can exceed \$27,500 per

RCRA—Superfund: What Is the Difference?

Years ago, people did not understand the risk to human health and the environment posed by certain wastes. Many hazardous wastes were dumped on the ground or in rivers, or left out in the open. As a result, thousands of abandoned hazardous waste sites were created. In response to growing concern over the risks posed by these sites, Congress established the Superfund Program in 1980. Superfund gives EPA the authority to order responsible parties to clean up contaminated sites, or to have those parties reimburse EPA for any expenses EPA incurs during cleanup.

How do the efforts under the Superfund program differ from the cleanups mandated under RCRA? RCRA mainly regulates how wastes should be managed to prevent contamination. In contrast, Superfund was designed to clean up previously existing, abandoned hazardous waste sites. Cleanups under RCRA are more likely to happen at currently active TSDFs, whereas the Superfund program is usually implemented at abandoned sites where the responsible party is unable or unwilling to pay for cleanup, or cannot be identified. The goal of the RCRA and Superfund programs, however, is essentially the same: to ensure that human health and the environment are protected from the risks of hazardous waste contamination.

day for each uncorrected violation. If the violation is judged to be deliberate, the violator may receive up to 15 years in prison and be required to pay up to a \$250,000 fine.

Such severe penalties, however, might not always be the most appropriate response to an unintentional or minor violation. EPA has a number of more efficient, less expensive ways of encouraging a facility to maintain compliance. EPA offers incentives, for example, in the form of reduced violation penalties to those facilities that perform self-audits, voluntarily report violations, and promptly take actions to rectify their problems and reestablish compliance.

Cleaning Up Releases

Despite the safeguards of RCRA's regulations, releases of hazardous waste to the environment from TSDFs

might still occur from either accidents, spills, or contamination persisting from past mismanagement of waste. Under RCRA, owners and operators of hazardous waste facilities must clean up the contamination caused by their activities. This is commonly known as corrective action. EPA may require corrective action for any releases of hazardous waste or constituents at permitted or interim status TSDFs. In addition, RCRA allows EPA to require cleanup of any waste management facility, including generator sites, if the Agency deems the release an imminent and substantial threat to human health and the environment.

Would You Like More Information?

RCRA, Superfund, and EPCRA Hotline

Call 800 424-9346 or 703 412-9810 in the Washington, DC area. For the hearing impaired, the number is TDD 800 553-7672.

You also can access information via the hotline's Internet site at <www.epa.gov/epaoswer/hotline>.

Additional Documents

These additional documents can help you learn more about the requirements for hazardous waste handlers. These documents are free and can be ordered from the RCRA Hotline. Reference the EPA document number (*EPA530...*) when ordering.

Understanding the Hazardous Waste Rules: A Handbook for Small Businesses—1996 Update, (EPA530-K-95-001).

The Hazardous Waste Facility Permitting Process, (EPA530-F-96-007).

RCRA: Reducing Risk From Waste, (EPA530-K-97-004).

RCRA Orientation Manual: 1998 Edition, (EPA530-R-98-004).

Contact Your State

Although EPA's federal regulations set the national standard for compliance, individual states often

have regulations that are more stringent than the federal regulations. You should contact your state about its specific regulations. State environmental contacts are available from the RCRA, Superfund, and EPCRA Hotline.

